

SOME UNUSUALLY STRONG SECOND BROODS OF LEPIDOPTERA IN N.W. KENT IN 1985 — Temperatures were below average in N. W. Kent in each of the first six months, except April which was deficient in sunshine. This may have caused delayed emergences and slower development of larvae, and perhaps heavier mortality amongst them. July was sunny and dry with above average temperatures, August cool and wet, but September was warm with the second half the warmest on record, to be followed by a mild October. Perhaps these conditions contributed in causing some remarkable second broods of moths in 1985 if light trap records reflect the true position. Two of the three species concerned produce larvae from first generation moths which may mature to give second brood imagines, or hibernate as larvae (or pupae). The following species appeared at my m.v. light at Dartford more commonly in their second brood than in any of the previous sixteen years, and also more abundantly than in the first generation. In 1985 the species were:—

(a) *Opisthograptis luteolata* L. From August 17th until September 25th this moth was abundant at the light although many remained settled outside the trap. Their numbers far exceeded those of generation Ia (from over-wintered pupae) noted from May 15th until June 5th and those from generation Ib (from hibernated larvae) seen from June 30th until August 1st, combined. Incidentally, it is not generally possible to separate the first generation specimens in this manner. A third brood of moths was reared indoors, the imagines emerging in late October and November.

(b) *Campaea margaritata* L. The 1985 second brood was quite phenomenal; it was in evidence from August 29th until September 29th, a longer period than usual. As many as twelve specimens were present on September 8th, and nine on the 12th; the first brood has never produced so many on one night. This species also tends to be reluctant to enter the trap, the moths settling on the surrounding vegetation.

(c) *Chloroclysta truncata* Hufn. From August 25th until October 12th this was the commonest moth at the light, while in both 1984 and 1985 first brood specimens were scarce. Often males especially of the second generation are small individuals, but in 1985 they could be said to be characterized by their large size, being quite comparable with those of the first brood.

With these exceptions 1985 did not produce significantly large second generations of other bivoltine species, on the contrary such species as *Epirrhoe alternata* Mull., *Xanthorhoe spadicearia* D. & S. and *Thera obeliscata* Hubn., usually common in the second brood, were distinctly scarce. — B. K. WEST, 36 Briar Road, Bexley, Kent.